

INTERACTIVE ART

A CREATIVE PROJECT

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MASTERS OF ARTS

BY

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Moo Man Adventures

Moo Man Adventures focuses on the power of interaction to provoke constructive thought and convey a simple narrative. Interaction promotes connections and the transfer of information from the game to the player. This piece piggybacks off platform games of the past, which at first glance, were oftentimes not considered art and did not produce deep, thought-provoking interaction. The platform game (or platformer) is a video game genre characterized by jumping to and from suspended platforms or over obstacles (Platforming Games).

The project uses similar game mechanics from well-known classics such as *Donkey Kong* or *Super Mario Bros.* and design elements from the recent film *Wreck it Ralph*. The theme of the game is of a serious focus pertaining to the destruction of nature and killing of wildlife. I used style and design inspirations from shows like *Earth Worm Jim*, *Bravest Warriors*, and *PowerPuff Girls* to counter-balance the serious theme. The player assumes the role of a superhero that fights to stop animal cruelty.

Game designer Jason Rohrer uses a combination of game mechanics and other methods to control the player's experience. He constructed the game *Passage*, which deals with the passing of time on the journey throughout life, old age, loss, and death. *Passage* uses simple two-dimensional artwork and animation with carefully planned camera movement, forcing the player to keep moving forward as a direct act of passing time. The simplified quality of the game lets the player envision whatever they want. Using objects like treasure chests to imply special moments in one's life is another way

he uses simple art to convey the journey of life. Mr. Rohrer calls it a "memento mori game," using a Latin expression that means "remember you are mortal" (Rutkoff).

The aim of my project falls along the same lines as the work of Rohrer. The piece will blend fun and lighthearted game play, like that which is found in many games from the past such as *Super Mario Bros.* and *Pac-Man*, to name a few. The goal of the game is straightforward -get to the top of the building and avoid obstacles along the way. The serious part of the game is saving large bags of aquatic life that the villain throws down the stairs before they hit randomly stabbing blades shooting from the floor.

Influences and Inspirations

In the process of developing this project, I have come across many influences that describe this new medium of interactive art and how it is intertwined with the commercial world of video games. My influences cover many phases of art and other forms of interaction with media.

My investigation of interactive art started with an examination of the principles behind interaction and its true meaning. The word “interaction” is used to define the ways of inputting and outputting information between two sources. For my project, I will focus on the power of physical interaction and how it can be defined as art in and of itself.

I have found many influences that shaped the visual quality, game mechanics, story, and the serious tone of this project outside of the art world. The video games that shaped many peoples’ childhoods (and the game industry as a whole) are an enormous influence on this project. . Video games may not be considered art in the conventional sense, however, they are capable of provoking a strong emotional connection between the player and the world, much like fine art.

The first influence that I based the game mechanics and play style around was the popular arcade game, *Donkey Kong*. It uses simple game mechanics of a two-dimensional platformer and mixes them with the simple goal of controlling the hero character Mario up to the top of a structure to save Princess Peach from a crazed gorilla. The story and goal of the game may be shallow, but the true artistry is in the

engaging interaction the player has with the game world. With my project, I wanted to take that engaging interaction and build a context around the often ugly treatment of animals in our society. With such a serious theme I also wanted to reference the extreme of animal rights groups like PETA who use crazy tactics to gain notoriety.

With a strong base of engaging interaction, I wanted to add a thought-provoking over tone to the game play without it getting too heavy. One influence that mixed the silliness of videos with more adult themes was the film *Wreck it Ralph*, which takes place in a world of video games where the game characters are self-aware. The character of *Wreck it Ralph* appears to be loosely based off of *Donkey Kong*, so the film relates well to my project. I enjoyed how they animated specific characters so that even when they were three-dimensional figures living in their world, they were animated in such a way that they still moved like two-dimensional sprite animations. With the focus of doing simple steps one at a time I used the jumpy sprite animation with my characters.

This project is a balance between serious themes wrapped in a shell of visual style, gameplay, and iconography that pushes the serious into the territory of the humorous. One of the influences that I pulled from on the humorous side was the short lived cartoon and video game *Earthworm Jim*. The cartoon used absurd situations like cows falling on people mixed with over the top characters to put the viewer into a world where anything could happen and did most of the time.

From that shell of silliness, I took the storyline of an extreme animal activist who gets transformed into a superhero fighting for animal rights. When I came up with the story, I took the idea of such a character from the many headlines I have seen over the

years about the animal activist group *PETA*. The over the top persona of *PETA* and the “any means necessary” way in which they appear to act is something many people would never see themselves doing.

The visual style of the project has a few varying sources of influence including *Adventure Time*, *Bravest Warriors*, *Freakazoid*, *Samurai Jack*, and many others. With the visual design of the characters, I looked at the simple shapes used on *Adventure Time* and *Bravest Warriors*. The creator of both shows, Pendleton Ward, uses designs with a childlike feel to them mixed with an anime undertone. His style gives the show a very approachable look that appeals to a wide range of viewers. Pendleton Ward also worked on games based off of his shows and he sees the power in video games.

Ward: “That’s what’s interesting to me about games. Interactive storytelling. I feel like it’s still relatively untapped. I think stories generally come second in game-making. It’s usually gameplay first, which is super-important, but I want to bulk up the story parts in the game, and see if I can reach the maximum potential in game-making and all that. It feels like a new frontier still” (Sanskrit).

Freakazoid and *Samurai Jack* also have a visual appeal built on simple design forms that can convey a range of different emotions. *Freakazoid* used extremely absurd situations mixed with a super hero character to tell their story.

My interest in animated television shows led me to look at the history of animation and where the industry as a whole came from. Even before the start of

modern animation in the twenties way back to the dawn of man people have used imagery and our vision to capture the world around us (Anderson). The cave paintings found in France show bison with multiple legs depicting the motion of running across the plains (Williams). As time passed and technology was refined inventors found ways to project light and quickly switch the images to create the illusion of motion. The early animation was raw but showed the possibilities for the future.

The hand-drawn animation from the early 20th century set the guidelines of animation we still use today. The builders of these guidelines were called the “Nine Old Men” of Disney Studios. The Nine Old Men are from the golden age of animation and include Les Clark, Wolfgang Reitherman, Eric Larson, Ward Kimball, Milt Kahl, Frank Thomas, Ollie Johnston, John Lounsbery, and Marc Davis.

The animators at Disney took their skills to the next level by using the techniques that the Renaissance masters perfected. They gained more lifelike movement through studying the natural world and breaking down the form into basic shapes so the motion could be better captured. They found that pushing the motion beyond the true movement of life would make the animation feel more natural. The animators discovered if they traced film stills and ran them at the correct frame rate, the animation would look off or not feel quite lifelike. What they realized was that if they pushed each key pose just a bit further than reality, it would feel much more believable.

Another game from Jason Rohrer that I took inspiration from is *Inside a Star-Filled Sky*, dealing with evolution and changing abilities to meet altering needs of ones surroundings. He is pushing the boundaries of what many conceive as art. He builds simplistic looking video games or interactive art pieces that convey whatever area of

focus he is interested in at that time. For example, he uses his new medium to construct an interactive piece that focuses on storytelling. The project developed by Rohrer, *Sleep is Death*, uses the players to fill roles that revolve around human interaction. The storyteller sets the stage for the other player, creating dialogue or quests for them to play through.

Rohrer's work examines a variety of social issues or areas of life that interest him. I find his ability to use this medium to convey social issues very interesting and thought-provoking. This interactive dialogue echoes back to the early forms of communication in which our ancestors conveyed their thoughts or feelings through touch, rather than language. Another general area I draw influence from is many of the creative Iphone games and other games that use creative forms of interaction to connect with the player.

The music used with my game was chosen based on the feel of games from the past and their use of simplified music to capture the tone of the game. The music has a rhythm to it that adds to the players' motion and makes a nostalgic connection in the process. Simple sounds were used as well to convey different interactions performed by the player, such as destroying the robot or saving the aquatic life. I used sounds I found or made to give the robotic and metallic blades an organic touch while keeping with the nostalgic, simplified sounds of the past.

Another source of influence and inspiration is the independent gaming/interactive art company *Tale of Tales*. This company focuses on making interactive content that relies less on narrative and more on the power of interaction. Their games also touch on social issues regarding women in our society and overpowering thoughts

such as death. For example, one of their most controversial games is called *Graveyard*. It deals with death and the changing of life as one ages. They used a scene of a cemetery and an old gothic-style statue to convey the feeling of age. The actual game play forces the player to move very slowly and constrains the view. These simple mechanics of interaction from player to game give the feeling of being old, but also gets the player thinking about why this woman is there and how important her loved one must be.

Through all of these sources, I will impart a story through thought-provoking interaction and game mechanics. Imparting a story through interaction is only in its infancy. With every step in technology, the ways we communicate and relate change to tell our stories

Moo Man Adventures

Moo Man Adventures combines the mechanics of game play with a serious theme and uses stylized imagery to lower the heavy emotional impact. The project focuses on a character whose main goal is to save animals that are being mistreated.

The interactive game uses very basic game mechanics seen in many games from the past that give the player greater ability to focus on what is happening on screen. The use of simple movement forces the audience to interact with the world in a very direct way. I broke down the interaction with the sushibots and the aquatic life the player interacts with to simple jumping or direct touch. The player can destroy the sushibot by jumping on them. With the aquatic life, the player has to come in contact with them in some way to save them. These interactions are very straight-forward, but clean and concise ways to convey the simple narrative.

I used the Game Develop engine because it has an easy setup, requires no code, and has quick turnaround of new builds to test changes. The only issue I had with the project development was the simple and somewhat limited animation system in Game Develop. The limitations worked well with the chosen animation style emulating the 8-bit simple art from the past. This led to questions of how to work this art style with a control scheme that would match. I also wanted to use the screen space wisely because of another limitation that forces the screen space to a maximum of 800 by 600. With that focus in mind, I looked to popular games from the past that used screen space very efficiently. I also wanted to contain the whole world within one view so that the

player could see all that was happening quickly. One main game reference I found that uses the whole screen was the arcade classic *Donkey Kong*, which showed the whole level on one screen and conveyed all of the information crucial to the player.

The main problem I needed to deal with was how to visually construct the system that would impart the storytelling elements of the interaction. I looked at designs from shows like *Adventure Time* and *Bravest Warrior* for their use of simple shapes to convey forms. To make the connection of nostalgia for the viewer, I did a couple of things to convey that feeling.

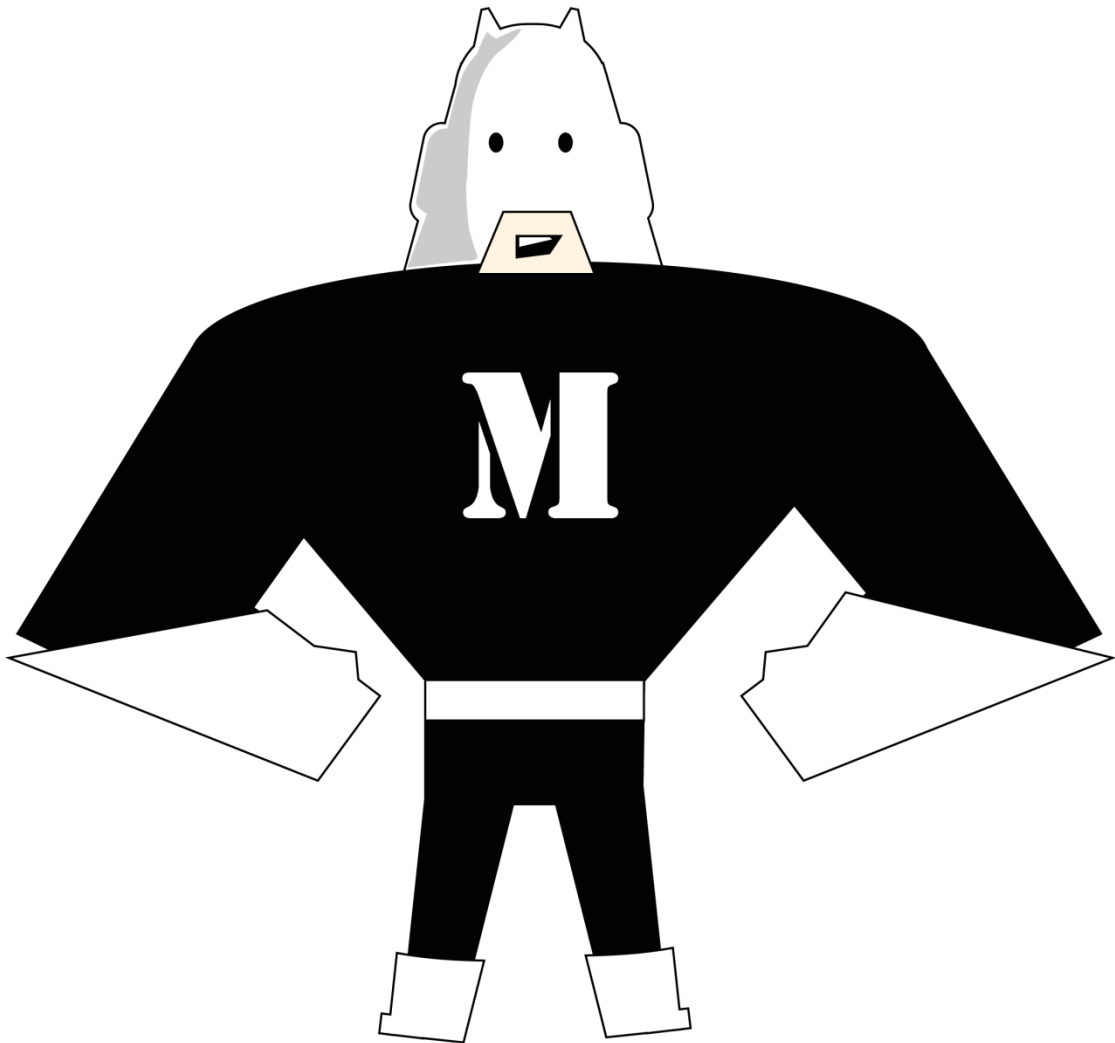
I noticed that the style of *Adventure Time* and *Bravest Warrior* were reminiscent of drawings from a child's school notebook. I went through drawings I did as a child and pulled a few reoccurring shapes or styles to work into the project. The main character, Moo Man, is a simple form with large arms and little legs. I used a straightforward color scheme for his outfit, focusing on black and white to make a better connection to his name, Moo Man.

Much like Jason Rohrer, I used iconic items to convey important points of reference in my game. The aquatic life the hero saves is depicted in plastic bags, much like ones found in pet stores. I chose this method of illustration to take the weight off the serious nature of the action going on and also as a fun way for the aquatic life to roll down the building. The visual design of this project blends basic simple shapes with varying color schemes and cartoon styles to be graphically appealing. The world is built from very simple shapes—squares or rectangles—layered on top of each other to build up the space. I wanted to use a simple stage so the player's focus would be on the interactions and not on the background.

I found that using the Game Develop engine made it easier to build the level and create the game world. Game Develop has an uncomplicated system of events that have a condition and action associated with it. The events system takes conventional programming and mixes it with a graphic interface so anyone can quickly setup complex interactions. The use of the Game Develop engine also gave me the ability to change many variables on the fly and see the changes in real time. For example, I could change the code for how far the enemy can walk in a given area and instantly play the game to make sure it works for the space. The game engine also provides the tool set needed to add music and other interactive qualities seamlessly into the rest of the experience.

Images of Project Development

Design of main character Moo Man



Game Develop event system

(Showing the creation of a character and movement)

4	<div>Var Variable Spawn is =5</div> <div>The timer "AquaticSpawn" is greater to 15 seconds</div> <div>1 Trigger once</div>	<div>Create object crabBub at position 290;50</div> <div>Allow crabBub to rotate</div> <div>Var Do +1 to variable NumberFish</div> <div>Reset the timer "AquaticSpawn"</div>
1	<div>Var Variable NumberFish is =3</div>	<div>Pause timer "AquaticSpawn"</div>
5	<div>Var Variable NumberFish is <3</div>	<div>Unpause timer "AquaticSpawn"</div>
6	<div>GoRight is in collision with crabBub (Collision masks)</div>	<div>Stop the object crabBub</div> <div>Add to crabBub a force of 85 p/s on X axis and 0 p/s on Y axis</div>
7	<div>GoLeft is in collision with crabBub (Collision masks)</div>	<div>Stop the object crabBub</div> <div>Add to crabBub a force of -85 p/s on X axis and 0 p/s on Y axis</div>

Simple bag and aquatic life



In the tech driven world in which we live, many people get lost in their emails, texts, and Facebook messages. With this project, I want to show people that technology plus interaction can evoke powerful emotion and make people question their position on animal rights, as well as the various ways in which technology can create new mediums.

Much like *Donkey Kong*, my villain has a simple goal. His focus is on destroying as much of nature as possible, so the game picks up with him sending sushibots to stop the hero Moo Man. He also shoots the aquatic life he kidnapped down the stairs, where they can potentially be killed by knives shooting up from the floor.

I added the knives to mimic the over-the-top actions of comic book villains. The villain in this game is Dr. Fishhead, who starts life as a robotic fish sent out to help humans better understand aquatic life. He finds that nature is illogical and dirty, so he slowly starts to hate animal life and wonders why the humans who created him cannot see how much better he is than natural fish.

The sushibots were designed with the henchmen from *Super Mario Bros.* or *Sonic the Hedgehog* in mind. I reference shows like *PowerPuff Girls* and others from Cartoon Network that use highly stylized character designs. The villains are simplified and read very quickly as comical, idealized bad guys. Using robots as the villains removes or lightens the weight of the real world connection to violence in the game.

The world the player interacts with is two-dimensional. I chose to use a flat world design to simplify the action and better control the camera view area. I found that the older games of the past that use simpler art and design let the player fill in the gaps and make the experience more their own.

Conclusion and Exhibition Statement

Through the production of this project, I have had a few moments where I reflected and found that I learned something new or relearned something I had forgotten. I found that the thing I kept hitting on with this project was learning new skills or finding out new features of software of which I had no previous knowledge.

Through the process of testing and building this project, I learned some very basic programming skills the hard way. Having a specific goal in mind of what I wanted to accomplish with a specific script helped to keep the project rolling. When I ran into issues that my limited programming skills could not overcome, I had to find creative Band-Aids to fix the problem. For example, I had an issue with the animation system and how many frames of animation it can handle. So I came up with a creative solution of reusing frames and creating events to play the different frames so the animation appears to be longer.

Moo Man Adventures opened my eyes to the power of programming and has shown me the importance of gaining a better understanding of it. It also took me out of my comfort zone and forced me to animate in two-dimensions, something that I have not done much of in the past.

With this project I wanted to focus on how a form of interaction in itself can be seen as art. The piece would echo back to very early forms of communication mixing the use of simplified imagery and storytelling to convey a complex message.

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